ABSTRACT OF THE DISCLOSURE

The present invention relates to a storage device provided with a file system for managing operations to record and reproduce data in file units in concentrated accesses made by a plurality of client apparatuses to the storage device through a network. A digital watermark can be embedded into file data handled by the storage device. Parameters required for embedding a digital watermark and digital-watermark-embedding algorithms are managed concentratedly by the storage device.

The storage device has a local file system, a digital-watermark-embedding processing unit and a data recording device for storing data and file-management information. The file-management information includes a digital-watermark-embedding parameter provided for each file and a digital-watermark-embedding parameter common to all files. When the user makes a request for an operation to store file data into the storage device, the local file system drives the digital-watermark-embedding processing unit to embed a digital watermark into the file data on the basis of these parameters and store the file data including the embedded digital watermark in the data recording device.